

REMARKS

Applicant notes the indicated allowability of Claims 15, 16, 18, 25, 37-38 and 48-51. Claim 36 and restricted Claims 1-12 and 42-47 have been canceled without prejudice.

Claim 17 stands rejected under Section 112 as indefinite for specifying the bath as comprising Nissan Chemical type MA-ST-UP. The claim has been amended as appropriate. Reconsideration and withdrawal of the rejection is solicited.

Claims 13-14, 19-24, 26-36, 39-41 stand rejected as obvious over Weiss (U.S. Patent No. 4,749,902) in view of Sekhar et al. (U.S. 6,455,107). The examiner appears to have overlooked the claim language or has misread what the cited patents fairly disclose. Moreover, the examiner has failed to provide any basis for combining the references as asserted.

Regarding independent Claims 13, 30, and 35 (as amended), each of the claims are directed to methods comprising the step of:

Claim 13 – adhering a **silica colloid** to at least a portion of a metallic foil;

Claim 30 - adhering **silica colloid** to at least a portion of the foil; and

Claim 35 – adhering colloidal silica to at least a portion of said metallic strip.

The examiner asserts that Weiss discloses a method of coating a metallic foil comprising the step of adhering a silica colloid to at least a portion of a metallic foil. The examiner is in error. There is no disclosure or suggestion in Weiss of adhering *colloidal* silica to a metallic foil. To the contrary, Weiss discloses the application of solder glass to a metallic foil by applying a *suspension* made from ground solder glass with an organic

carrier substance. (see col. 3, lines 18-22; col. 4, lines 5-8). A “suspension” is not a “colloidal solution” and thus the application of a suspension containing ground solder glass containing silica to the foil does not teach or make obvious the step of adhering colloidal silica to a foil.

The examiner has rejected independent Claims 13, 30, and 35 (and Claims 14, 19-24, 26-28, and 31-34, and 36-41 dependent therefrom) on the erroneous basis that Weiss discloses the step of adhering colloidal silica to a foil. Since there is no disclosure or suggestion of the claimed methods, reconsideration and withdrawal of the rejection is appropriate. Moreover, dependent Claims 14, 19-24, 26-28, 31-34, and 37-41 are each patentable with Claims 13, 30, and 35 without resort the additional patentable limitations recited therein.

Regarding independent Claim 29, the examiner has provided no basis for rejecting this claim. There is no disclosure or suggestion in any of the cited patents of a method of applying a silica coating to a metallic foil comprising the steps of introducing silica powder to the plume of an argon plasma torch and passing the foil through the plume. Reconsideration and withdrawal of the rejection of Claim 29 is appropriate.

Further with respect to Claims 13, 30, and 35, the examiner acknowledges that Weiss fails to disclose the step of exposing the silica colloid to heat to effect fusion of silica particles, but that Sekhar et al. discloses exposing colloidal silica to a fusion temperature to effect fusion of the silica particles. The examiner is in error. Sekhar et al. disclose the application to a carbonaceous substrate of a colloidal slurry made from a course powder (particulate) and a colloidal carrier. The powder is then exposed to an

elevated temperature to effect *sintering* of the *powder*. A process of *sintering* a powder does not teach or suggest a process of *fusing* colloidal particles.

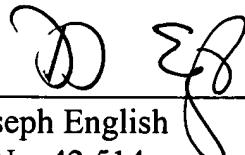
The process of “sintering” is defined as “the thermal treatment of a powder or compact at a temperature **below the melting point** of the main constituent, for the purpose of increasing its strength by bonding together of the particles.” (ISO definition from www.azom.com) (emphasis added). The process of “fusing” is defined as “combining or blending by **melting** together.” (Webster’s New Universal Unabridged Dictionary)(emphasis added). Clearly, sintering and fusing are not the same process, and the disclosure of one process does not suggest the other. There is no teaching or suggestion in Sekhar et al. of a process for fusing colloidal silica particles to form a silica film. The examiner has provided no basis, and cannot provide a basis, for modifying the teaching of the cited references to meet the limitations of the claims.

Reconsideration and withdrawal of the rejections of the claims is solicited.

Consideration and allowance of new Claims 52 and 53 is solicited. No new matter has been added.

A further and favorable action and allowance of all claims is solicited.

Respectfully submitted,



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